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Technical Report No. 148

CULTURAL AND SITUATIONAL VARIATION
IN LANGUAGE FUNCTION AND USE:
METHODS AND PROCEDURES FOR RESEARCH

William S. Hall and Larry F. Guthrie
University of Illinois at Urbana-Champaign

October 1979

Center for the Study of Reading

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Abstract

This paper represents a report on work-in-progress. Here we attempt to lay out the issues surrounding our research project and the questions we hope to answer with it. We describe the ways in which our research is developing and the procedures we are following. Although no data is presented, the methods of collection and analysis are discussed in detail. The issue of most concern in our research is whether or not minority groups use language in ways that systematically put their children at a disadvantage at school. We want to see if cultural or social class differences in language use have cognitive, social, and/or educational consequences for children so classified. It is widely believed that these differences do, but, while this is an attractive hypothesis, solid evidence for it is lacking. We argue that an adequate test of this hypothesis must include data on naturally occurring language. To that end, our research combines ethnographic and experimental methods. Audiotapes were made of preschool children representing different combinations of ethnic group and social class membership. Our research focuses on nine specific questions which are presented here along with the approaches we are taking to answer them. In the last section of this paper, we indicate three representative ways in which data analysis might proceed.

Cultural and Situational Variation in Language Function and Use:
Methods and Procedures for Research

It is widely believed that there are cultural differences in the functions and uses of language among various ethnic and cultural groups in the U.S.A. (see, e.g., Cazden, John, & Hymes, 1972; Hall & Freedle, 1975; Labov, 1970). In fact, the idea of a mismatch between speakers in language functioning and use is often given as one explanation of the educational difficulties some children have in school (Bernstein, 1964, 1972). Empirical support for this explanation, however, is very thin. An examination of previous research reveals at least three reasons for the lack of evidence: (a) The situations used to evaluate language have been quite restricted; they have concentrated primarily on language used in schools or in strictly experimental situations. (b) There is ambiguity about the terms "function" and "use;" it is not clear whether they should be approached from the perspective of communication and cognition, or from the point of view of social parameters only. (c) The primary emphasis in recent work has been on content (vocabulary) and structure (grammar).

In order to overcome these weaknesses a different approach is required. Specifically, the approach should: (a) combine psycholinguistic and ethnographic methods; (b) emphasize situational variation within as well as across settings; (c) sample from Blacks and Whites, lower and middle class subjects (groups seldom sampled before in a single study); (d) incorporate a sample whose size is large enough to permit supportable

inferences; (e) focus on the combined aspects of structure, content, and function in language; and (f) evaluate change in language use and function in the transition from home to preschool.

This paper will be devoted to a description of a major research project which uses the combination of methods stated above. The paper will also focus on illustrative examples of how data analysis might proceed when such methods are employed.

Statement of Issues

The general hypothesis underlying the work to be discussed is that minority groups and the poor use language in ways that systematically put their children at a disadvantage at school. By sampling children from different cultural and socio-economic groups, the research focuses on the consequences which different patterns of language function and use may have for the child.

The single most important issue in this regard is the consequences of different usage patterns for the speaker, particularly with respect to his or her educational performance. Broadly speaking, these consequences may be social, cognitive, or educational--three areas which are certainly part of any theory of cultural variations in school performance. We will now treat these in turn.

Social. The social consequences of "non-standard" speech for children can affect both teacher-pupil and peer relationships. The consequences of a teacher's attitude toward a given dialect can be profound. For example,

a teacher's attitude can affect his or her initial judgment about the intelligence of a child, how he will fare as a learner, how he is grouped for instruction, and how his contributions in class are treated. This in turn affects the child's attitude about himself as a learner, his willingness to participate, and his expectations about results of his participation.

The consequences of non-standard speech with respect to one's standing with peers may also be profound. It is often suggested that for high status peer and school settings require opposing rules for using or not using language in various ways.

Cognitive. There is a long tradition in the cognitive social sciences linking language and thought. What is not clear is whether different patterns of language socialization in the home have directly discernable cognitive consequences.

We are particularly concerned in the current research with the evaluation of the cognitive consequences of patterns of language usage identified by Bernstein (1964, 1972). In his work, a basic question remains unanswered: Do cultural/class differences in language usage affect people in other-than-social ways (e.g., cognitively)?

Of concern are cognitive consequences which might result from differences in various aspects of language, such as vocabulary. Vocabulary differences clearly reflect differences in public access to one's ideas. They lead to unequal opportunities to talk about a given meaning or aspect of meaning; as a consequence of this each speech community would have different access to its members' and others' ideas. At a deeper

level, different types of speech involve different opportunities to engage in certain basic cognitive processes. For example, the process of modification in the case of adjectives or adverbs, or the process of subordination in the case of conjunctions, could easily be affected by differentially elaborated vocabularies. There is also evidence suggesting that unrecognized differences in vocabulary result in mis-estimates of memory capacity and "general intelligence."

Educational. The possible educational consequences of speaking a non-standard variety of speech can be illustrated for three areas: reading, ability to engage in "instructional dialogue," and the ability to deal with a kind of meta-behavioral information. With reference to reading, a phonological mismatch can affect children's acquisition of phonic skills. Phonological mismatches are likely to lead teachers to misinterpret children's reading of a sentence. (For example, if a child says "John pin" when he sees the phrase John's pen, the teacher could misinterpret this as a mistake instead of a different pronunciation.)

In addition, semantic mismatches may affect children's expectations about the gist of the language that they are reading. Syntactic mismatches may also affect children's expectations about gist (see. e.g., Piestrup, 1973). Moreover, different cultures might promote different levels of metalingusitic awareness, and some cultures might provide more practice than others in those skills which are reasonably isomorphic to the kinds of processes that children have to use in learning to read--for example, counting-out rhymes and jump rope chants which are based on alliterations or rhyming.

Certain patterns of early language socialization perhaps also hamper children's ability to engage in "instructional dialogues" when they enter school, i.e., the kind of communication situation in which a teacher and pupil engage in a question and answer routine, and where the questioner has a specific answer in mind and the answerer's job is to guess what that answer is. The big difference between this type of interaction and the "normal" question and answer exchange is that the correctness of the answer is not necessarily judged on its truth value, but rather on its conformity to a strategy or plan for answering which the teacher has already constructed. The question is, does the communication environment provide an opportunity to engage in interactions which are similar to that of instructional dialogue? Here "similar" is used in the sense that the requirements of a correct answer are based on some ability to intuit the kind of answering strategy that the questioner has in mind, rather than on truth value or some kind of aesthetic organization of the speech act.

Patterns of language socialization that characterize some cultures/classes are often said to interfere with a child's ability to deal with analytical or "meta-behavioral" information, i.e., the ability to analyze and make analytical statements about certain kinds of behavior not always reflected upon in everyday life. These include perceptual awareness (the ability to analyze a perceptual array into a set of geometrical or mathematical relationships) and behavior awareness (the ability to analyze the

emotions of a person or those of a fictional character). To understand how being a member of a given speech community might affect the ability to make this type of analysis, it is necessary to consider whether or not different cultures provide differential opportunities to engage in the kind of meta-behavioral analysis mentioned above. Since this kind of analysis is a hallmark of schooling, it is a prime area for studying home/school mismatches (see, e.g., Scribner & Cole, 1973).

To see how these and other issues are dealt with in our research project, we now turn to a more detailed description of that work.

The Research

As a preliminary to the research, an exhaustive review of the literature in relevant areas was undertaken, revealing several substantive limitations. As mentioned above, earlier studies suffer from (a) the use of limited situations, (b) the ambiguity of the meaning of the terms "function" and "use" in language, and (c) an emphasis on content and structure. In addition, it was found that (d) the nature of the analysis used (e.g., correlational, experimental, survey) obscured pertinent information (cf. Mehan, 1978, 1979); (e) sample size was usually too small to justify inferences; (f) the failure to study middle class as well as lower class subjects from all groups being compared restricted conclusions; and (g) the important transition from pre-school to the first grade was neglected.

Given the present state of knowledge, a number of pressing questions about the educational performance of the urban poor still remain unanswered.

Certainly, the relation of language usage and school performance among different ethnic and SES-defined groups is one of them. We believe that the research program described here, and other studies like it, will ultimately discover the path leading to a solution of these problems. As a first step in that direction, the research is aimed at three general questions about young children and the significant adults in their lives:

1. What are the important dimensions of language differences among cultural groups in the U.S.A. as defined by SES and ethnic group identify? Specifically, these differences should lie in language structure and content, i.e., vocabulary, grammar, and phonology.
2. Do patterns of language usage distribute across social setting and speech situations in the same way for different cultural groups?
3. What are the cognitive consequences of variations in language function, especially the functions into which young children are socialized?

In conceptualizing the research, we reasoned that a naturalistic study of language as used by young children (age 4½-5 years) would be required. Prior to our research, naturalistic studies of language usage of parents and young children have been rare (cf. Horner & Gussow, 1972; Ward, 1971). Existing studies have employed primarily interview-based and school-based data. Without the evidence provided by more naturalistic language, the questions raised in this paper cannot be answered adequately.

To do a naturalistic study of language, an ethnographic method is the most useful. This method involves fairly accurate descriptions of

behavior as it emerges in context; thus both the talk itself and the context in which it occurs are described. The behavior we wish to study has little descriptive value without the careful charting of its antecedents and consequences in context. This careful charting is what we mean by ethnographic method. For this research, then, extensive samples of language usage in natural contexts were obtained. These consisted of recordings of conversations between target children and their parents, siblings, teachers, and peers, representing a variety of physical and temporal contexts.

Further, it was decided that the focus should be on the intellectual consequences of differences in language structure, content, and function as these interact with social class, ethnic group membership, and setting. In this regard, the work draws upon and extends two disciplines in the behavioral sciences: sociolinguistics and developmental psychology. With respect to sociolinguistics, it builds upon and extends the work of Labov (1970) on the elaborations of structure; of Houston (1969) on specific registers and shifts in these registers; of Ward (1971), Horner (1968), and Hall, Cole, Reder, and Dowley (1977) on the communication network as portrayed in the home and immediate surrounds. Regarding developmental psychology, it builds upon and extends the work of Hess (1969) on cognitive environments, and White and Watts (1973) on the environment of the child in general.

Methods

The methodology employed here is what Hymes calls the ethnography of communication (Hymes, 1974). In a general ethnography, the goal of the ethnographer is a verbal re-creation of the world of the target culture. It should be a descriptive account which members of the target culture recognize as their own experience of reality. In contrast, the ethnographic component of the research described here is more focused in that it concentrated on naturally occurring speech. By recording language in the everyday lives of the target children, actual language experiences of subjects were sampled. Data on other aspects of the subjects' lives were included only as they related to the functions and uses of language.

Language samples were collected through the use of audio tapes. There were several reasons for this. First, the complexities of language are too great to be captured by a participant observer's field notes. An observer's notes could not adequately record, for example, the multiple functions of language in context. For the same reasons, checklist data would be inadequate. The limited perspective of checklists would also require that a more sophisticated data collection method be employed. Audio tapes satisfy this requirement.

Second, the audio tape equipment (portable tape recorders with wireless microphones) was manageable enough to permit data collection in a number of different settings. Data were collected, for example, in homes, shops, moving cars, and on sidewalks. The mobility achieved in this way

would not have been possible with, say, video tape machines. Even though video-tape provides more complete data, in a study such as this its use is impracticable.

Finally, the tape equipment did not seem to cause any significant disruption in the normal behavior of the target children. The wireless microphones were, for example, sewn into colorful vests which target children wore without protest; in fact, they seemed to quickly forget about having them on.

Subjects

Subjects were 40 preschool age children (4.5-5.0 years) divided equally according to race and socio-economic status (SES) as follows: lower class Black (10), lower class White (10), middle class Black (10), middle class White (10). SES was determined through the use of income and education indices from the scale developed by Warner, Meeker, and Ellis (1949).

Procedures

Language samples were collected over two consecutive days. Taping was done through the use of stereo tape recorders and wireless microphones worn by both the target children and the field worker. Target children wore vests with microphones sewn in; field workers clipped microphones to their ties. Although adults and non-target children in the study did not wear microphones, the two mikes used were, in general, sensitive enough to pick up all significant verbal interaction with the children in the study.

In order to sample situational variations in language, each child was recorded in a series of ten temporal situations: (a) prior to school in the morning; (b) on the way to school; (c) during the transition to the classroom; (d) during free play; (e) during teacher-directed activity; (g) during snacks and toileting; (h) on the way home from school; (i) prior to dinner; (j) during dinner; and (k) prior to bed. The setting for these temporal situations consisted of not just home and classroom, but playground and community as well. Additional recording was done of parents in a formal interview situation (see Appendix) which investigated questions relating to the child and his home and school environments.

In the collection of data, the field worker tried to be as unobtrusive as possible. He rarely initiated conversations, but, if spoken to, attempted to respond naturally. One of the field worker's responsibilities was to provide a verbal description of the context. For the purposes of this research, the context included where the recording took place, where the subject was, who the interactants were, and what they were doing--both their verbal and non-verbal behavior. Furthermore, the descriptions of context often included what happened prior to and subsequent to, as well as simultaneous with, verbal interaction.

The length of the recordings in each of the temporal situations varied from 15 to 60 minutes. When summed, this amounts to a total of 420-500 minutes of talk for each child and about 300 hours overall. Hand-written transcripts were made of the recordings and coded onto computer

punch cards and then computer tape. Each turn of talk was transcribed on a separate punch card (or two cards if necessary because of turn length), producing a total of 10,000 cards per child or 400,000 overall. On each punch card, in addition to the transcription of a turn, the following information was coded: subject number, SES, race, speaker, and situation.

Research Questions

In assembling the corpus, nine questions were formulated. In each, the interest was in group differences as they are related to particular contexts and to the social, cognitive, and educational consequences for the child. The questions focus on three aspects of language: (a) differences in language structure and content; (b) patterns of language usage across groups; and (c) differences in language usage across natural and formal settings. In the pages that follow we will present the questions, grouped according to the aspect of language upon which they focus.

Structure and Content

Question #1: Are there differences in the way Black and White speakers structure portions of the lexicon? There might be certain differences in the way in which speakers of Black dialect and Standard English structure prepositions. For example, Black Harlem adults have been observed to say the following to children: "John, sit to the table." In this instance, a Standard English speaker would probably say: "John, sit at the table." The question is whether or not the rendering, "sit to the table" does not suggest to the child a different relationship between himself and the object table than that interpretable from "John, sit at the table." Essentially,

the first instance is more factive than locative. Such potential differences in structuring the lexicon are of special interest because of their implications for cognitive functioning as it is exemplified in standardized test performance.

On a broader scale, the reasons for asking about lexical structuring have to do with the centrality of this structuring in human experience. Space and time, both of which can be readily revealed through prepositions, are basic coordinates of experience. Since only one object can be in a given place at a given time, spatial locatives provide an indispensable device for identifying referents. Hand me the spoon on the table identifies the spoon that the speaker is referring to. The place adverbial, on the table, indicates a search field, and the head noun, spoon, provides the target description. As Miller and Johnson-Laird (1976) indicate, how a search is to be executed depends on the particular preposition relating the target to the landmark: on, in, at, by, under, etc. How children learn to delimit the search field and the cultural variations in this procedure are of extreme interest.

Brown (1973) has observed that in and on are among the first words children learn to use. This suggests that understanding the relation of a target to a search field comes early in the life of the child, as does the child's understanding of the topology of spatial relations in general. According to Brown, these understandings seem to grow naturally out of the child's mastery of sensorimotor coordinations in space and time.

Question #2: Are there differences between vocabulary used in the home and that used in the school situation? Answers to this question might be found first in raw counts and frequencies of lexical items. In addition, little is known about social class differences in the way in which certain parts of the lexicon are structured. Miller and Johnson-Laird (1976) have provided a theory on the way in which spatial relationships and verbs of motion might be structured, but no empirical evidence is available.

In the research program we are discussing, evidence bearing on the question of home/school differences is being sought in two ways: (a) A search is being conducted of the naturally occurring data with respect to lexicon. An alphabetical list of all words in the corpus is being produced and coded for subject, speaker, and situation. Alphabetical lists for each subject are already available. In addition, Hall and Tirre (1979) searched the corpus for the use of words from four standardized intelligence tests: The Stanford-Binet, WISC-R, WPPSI, and Peabody. They found that, overall, speakers produced more of the target words at home than at school, and that middle class children produced more of the words at home than did lower class children. No overall differences were found for race or social class. (b) A series of assessment interviews (Appendix) adopted from previous work are being conducted with the children and their parents. These interviews are designed to assess the degree to which children's actual comprehension of certain terms incorporates the "rules" or relationships

hypothesized in Miller's theory of lexical structure. The concern is with both raw counts and frequencies and the different contexts that any given vocabulary item enters in the communication network, on the assumption that frequency and variability of context are both important for completely developed word meaning.

Question #3: Admitting that phonology and grammar are equally important determinants of dialect assessment, does phonology play a greater role in producing misunderstanding between teacher and student?

This question can be seen to relate directly to the role of dialect in learning to read. Simons (1973), for example, has noted that one major behavioral consequences of the differences between the Black Dialect and Standard English phonological systems for reading acquisition is that certain written words are pronounced differently by Black Dialect speakers than by Standard English speakers. The results of these differences are words that have a pronunciation unique to Black Dialect, e.g., nest--"ness," rest--"ress," hand--"han." Moreover, there are words whose Black Dialect pronunciation results in a different word, e.g., test--"Tess," mend--"men," walked--"walk," cold--"coal," find--"fine," etc. The latter pronunciations result in an extra set of homophones for Black Dialect speakers. These differences in pronunciation could interfere with the Black Dialect speaker's acquisition of word recognition skills.

Question 1-3 provide a view of vocabulary differences for children at different age levels, as well as for adults (e.g., mothers and teachers). The role of lexicon vis-a-vis basic readers, code-switching by context, and the role of parent-child interaction in vocabulary is being investigated,

as is the relative importance of grammar and phonology in teacher-pupil misunderstanding. Further, a central issue in "bidialectalism," namely, whether grammar and phonology vary within settings as well as across settings, can be addressed through collecting data on these questions.

Patterns of Usage

Question #4: To what extent do children rely on non-verbal as opposed to verbal cues in obtaining information from the environment and communicating information about the environment to others? This question is being asked for the target child in each of the settings where sampling of language was done. In the more structured of the situations, the work on referential communication guided the data collection (e.g., Glucksberg, Krauss, & Higgins, 1975). Among the questions being asked are: (a) How does the target child acquire information from others (adults, older children, peers, etc.); and (b) How does his information acquisition differ, and/or how is it similar to that in the naturally occurring events of his everyday life?

Question #5: To what extent are children likely or able to adopt a hypothetical stance toward linguistic information? Verbs and conjunctions are important pieces of data needed to answer this question. The use of verbs, for example, is important to analyze because they are essential for ascertaining meaning in sentences. Verbs are necessary for prediction in English, and prediction makes sentences something more than a string of word associations. The verbs of particular interest to us are those of

motion (e.g., move, come, go, walk, jump, run, reach, arrive), primarily because they can be studied with young children. These verbs can occur in relatively simple sentences, they have a fairly obvious perceptual basis for reference, they combine spatial and temporal aspects, and the children use them frequently. A detailed analysis of verbs of motion has been represented by Miller and Johnson-Laird (1976). Suffice it to say that the motion verbs--come and go, bring and take--occur frequently in child language although they involve some rather complicated relations of the direction of motion to the region of the speaker and his addressee. An analysis of these verbs has been done for adult speech by Fillmore (Note 1). The data can be searched for spontaneous occurrences of these verbs to see if they are ever misapplied or confused. The question is: Does the young child who uses motion verbs really understand them?

It has been noted by Miller and Johnson-Laird (1976) that analysis of verbs like jump, for example, into their semantic components leads to several possibilities. The paraphrase, she jumped the fence, would translate into something like "She did something with her legs that caused her to begin traveling over the fence," which includes such semantic components as motion, path, action, causation, etc. If young children use such verbs correctly, they probably do so on the basis of representations other than those revealed by semantic analysis. That this is probably the case has been suggested by Nelson (1973) in her hypothesis that concepts develop from intra-referent variations, not from inter-referent variations. The semantic analysis

represents a summary of differences between related words, whereas children may develop a concept of jumping without considering differences between jumping, launching, throwing, bouncing, and other related concepts. The verbs of motion provide productive materials with which to test these notions.

Question #6: Do children adjust their speech to reflect the contextual needs of a situation? For example, do children adjust their speech to accommodate to the needs of others? Evidence from referential communication literature indicates that they do, at least in experimental situations (Shatz & Gelman, 1973; Asher, 1978). Much less is known, however, about children's use of speech in natural settings or the effect of situational variables. The study by Hall, Cole, Reder, and Dowley (1977) is notable in that it does measure the effects of situation on children's speech.

In this study, the speech of lower class Black preschool children was studied in two situations, the classroom and a supermarket. The results showed that in the less formal supermarket situation children were both more verbal and more spontaneous, thus indicating that situational constraints do have an effect on children's speech. Exactly what these constraints are and the way in which they operate on children's speech remain to be studied, however.

One approach with the present corpus might be to search for instances when subjects communicated information. These could then be coded for situation, listener, etc., and measured for accuracy or completeness.

Question #7: Concerning the meta-behavioral activities of the children: (a) Are they able to describe their own behavior and inner states? (b) What is the nature of the lexicon that children have developed to describe their own behavior and inner states? and (c) What kind of meta-linguistic awareness have children developed?

Following a set of procedures developed by Gearhart and Hall (1979), and Hall and Nagy (1979), the corpus might be examined for evidence concerning the use of internal state words (e.g., know, sight, hopeful). Consideration would be given to, for example: (a) the percentage of internal state words used by different speakers in different contexts, (b) the semantic or pragmatic use of the words, and (c) the relation of particular lexical items to mental activities. The hypothesis here is that the use of internal state words can facilitate the acquisition of metacognitive processes and help the child to become an active seeker, interpreter, and user of knowledge.

Investigations which follow from Questions 4-7 will, when finished, provide a check on the validity and situational variability in language patterns formulated by Bernstein (1972) as elaborated and restricted, as well as on Horner's analysis of simple vs. elaborate tacts in interpersonal communication. The structured setting data will be compared with that from the unstructured setting as a means of disentangling dominant modes of speaking from possible ones. Perhaps most importantly, answers to questions 4-7 will provide some much-needed data on the implications of language socialization modes for cognitive skills, a point on which there is much controversy.

Comparison Across Settings

Question #8: Are there situational differences in the use of language among adults in "structured" situations? An example of a structured situation which might be useful here would be the interview, both individual and group. Here we would predict that both middle and lower class adults will produce more language, and a more complex language, in group than in individual interviews, and that the difference in language between the two situations will be greater for the lower than for the middle class. The subject of such interviews could be video taped situations like child-parent interactions or child-teacher interactions. These interactions should be open-ended; the following are examples: (a) the child breaks (or is about to break something); (b) the child hurts someone (or is about to hurt someone, e.g., a younger sibling); (c) the child asks for help with a task in a situation where the mother appears to have just finished a burdensome chore; (d) the child asks for help with a task in a situation where the mother appears to be very busy; (e) the child does something inappropriate at a family-style social gathering (e.g., a Sunday dinner); (f) the child does something inappropriate during an interaction with a strange member of the establishment (e.g., while the mother talks to a shopkeeper or to a doctor or nurse at a clinic or to a secretary or other office worker at school); and (g) the child indicates an ability to do something independently in a home setting. The teacher-child interactions could be investigated along similar lines.

Question #9: What is the proportion of different uses of questions across different cultural groups? Efficient accumulation of information is critical to school performance, and questions are cues to provide information and elicit information--seeking behavior in the child. Moreover, they are a verbal means by which a child seeks information. The data on questions in adult-child and child-child interaction in natural settings is lacking; it is believed that the corpus will provide this data.

Analysis of the Data

Having amassed a tremendous amount of data from largely naturalistic sources, the problem becomes one of analysis. Obviously, any analysis should be planned in terms of some set of problems. In our case, we have articulated problems regarding the functional use of language in terms of a series of questions. All of these questions cannot be approached at once; some discussion must be undertaken about how to proceed. For example, if one wishes to focus on lexical analysis, he could proceed in the following way:

The first part of such an analysis could focus on the individual lexical item, i.e., vocabulary. Vocabulary variations might be looked at in a variety of ways, all of which could be treated against a grid formed by the combinations of four basic population groups (Black/White by middle-class/lower class). This analysis should also include situational variation (e.g., home vs. school, dinnertime vs. bedtime, lessons vs. free play, etc.). A simple word count would uncover, among other things,

if there is a reason to tailor initial reading vocabularies to special groups. Another aspect of this analysis involves matching the obtained vocabulary with vocabularies used in psychological tests, e.g., the Stanford-Binet; the WISC, etc. (Hall & Tirre, 1979). These two analyses are essentially frequency distributions. They are fairly easy to do, given the state of the data, and should yield two products: a "dictionary" of spoken words and a report detailing the relationship between obtained and expected vocabularies.

A third line of lexical analysis might involve searching the obtained vocabularies for lexical domains that are of special theoretical interest because they relate directly to established theories of cultural differences in language usage (e.g., function words, verbs, prepositions, etc.).

Another analysis of the data might focus on mother-child interaction. This analysis might focus on the question of whether the mother's language in a formal, "school-like" situation constitutes a context for the child's performance. Specifically, what might be looked at is how the mothers talk to their children to ensure a high level of performance on "school-like" tasks. The context here is taken as being constituted by what people are doing and where and when they are doing it (Erickson & Schultz, 1977). People in interaction become environments for each other's behavior (McDermott, Note 2).

A third approach to analysis might concern investigation of constraints on conversation. When participating in conversations, children must

continuously produce language which achieves communicative goals and is appropriate to the communicative situation at each point in the conversation. Thus, children are constrained both by the "local" circumstances of the conversation and by the need to achieve the personal goal which they bring to the conversation and which explains their decision to participate. Children are thus constrained from the "bottom-up" by the grammatical form, illocutionary functions, and content of utterances which occur in the conversation; and from the "top-down" by their own communicative goals. The analysis of talk in conversations must centrally involve the analysis of how children produce language which satisfies different kinds of constraints and of how they use their cognitive, linguistic, social, and cultural resources in producing appropriate talk. The goal of this analysis would be to understand the constraints on children's decisions in speaking and the manner in which they use the resources at their disposal.

If some turn made by a speaker is labeled i , and the turn that immediately follows it $i + 1$, then what is of interest is the unit consisting of the pair i , $i + 1$. How does i constrain $i + 1$ and how do children use the resources available to them in producing an appropriate response? These questions constitute the basic level of analysis. Other levels might consider, for example, how $i + 1$ relates to turns prior to i and $i + 1$. In this way, the manner in which higher level discourse units in a conversation provide a link to the child's developing ability to produce and understand coherent discourse could also be considered.

The ability to produce and understand coherent discourse is one of the major accomplishments and requirements in becoming "schooled" in our culture. It is probable that cultural differences in the functions and uses of language will be apparent in the structure of conversations, and that it is because of them that an educational mismatch is effected, rendering some children at a disadvantage in acquiring the ability to produce and comprehend coherent discourse. Given the current state of knowledge, it is possible to list some classes of constraints and resources which operate in conversations: (a) illocutionary, i.e., the intentions motivating utterance type, such as questions, statements, etc.; (b) inferential content, i.e., relations in and among and beyond the propositions to be interpreted; (c) grammatical form; (d) social relationships among speakers, both the status they bring to the interaction and the role they create; (e) shared meanings and prior knowledge; (f) settings; (g) the task in which one is engaged and one's conception of it; (h) the prior discourse in the same setting; and (i) cognitive demands of the task.

Summary

This paper has described one attempt at a solution to a difficult educational problem--the failure of minority children to succeed in school. While it is certainly not the only cause, we have suggested that a mismatch between the functions and uses of language at home and at school might have an important influence on the academic success of such children. It is believed that ethnic minority groups use language in ways that systematically put their children at a disadvantage in school. Language differences

can have tragic consequences for children as they move from the home community into the middle class world of the school. Socially, the child may experience both teacher and peer prejudice because of the dialect he speaks. The child may find his speech patterns limit him cognitively, as well. In addition, language differences may place academic success out of reach.

We have described a research program designed to investigate these possible consequences in minority children. For this research, language samples were collected from an equal number of Black and White, lower and middle SES children. The children were recorded in a variety of physical and temporal situations and in interaction with parents, siblings, teachers, other adults, and peers. After a massive data-collection effort, a corpus of more than 300 hours of natural language had been obtained.

A series of nine questions guided the research; these question focused on three aspects of language: (a) differences in language structure and content; (b) patterns of language usage; and (c) differences in language usage across groups. Finally, in this paper, three examples of possible approaches to data analysis which relate to these questions were presented.

The plight of ethnic minorities in the American educational system should be the subject of a concerted research effort. However, before any further steps are taken one caveat must be made emphatically clear: answers will not lie in experimental, survey, or interview data alone. Attention must be given to the reality which minority children experience,

and this can only be achieved through the inclusion of ethnographic methods in research methodologies. The research design reported on here is only one form that such studies might take, but all will at least have an ethnographic component in common.

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Appendix

Interview Schedule

Statement of Purpose: Today's interview is a second part of the language study that we are doing at _____ in conjunction with _____. You will recall that we recorded _____'s talk last school year. We have transcribed about 60% of this sample of talk. To make any interpretation of this talk meaningful, we need to get an estimate of the variety of home situations represented by the children in our sample. Of course, your responses will remain anonymous.

1. How many children do you have? What are their ages? Sexes? In what grades are they? In what schools? (Note: If not in school, determine whether employed and/or separated from the family.) Is any child in your family adopted?
2. What is your morning routine for getting the family out of the house?
3. What age children are most interesting? Why are the Xs more interesting? What does your husband think and why?
4. Let us return to _____ and school.
 - a. How does he generally do in school?
 - b. In what area has he improved in the past year? The least?
 - c. How do you feel about his school progress? What do you expect him to achieve? What would satisfy you?
5. How do your other children generally do in school?
6. What organizations or clubs, if any, do you belong to (PTA, Church, Political, etc.)? Does your child know what you do in these organizations? ____yes ____no How?
7. What are your favorite recreation pastimes? Your husband's? What recreational activities do you and your family engage in on weekends together? What places have you visited on weekends during the past six months? Why?
8. Do you usually plan your weekends and vacations ahead of time? How often? Who makes the plans?
9. Where have you, as a family, traveled during the past two years? Why were these places chosen? What specific activities take up most of your time at these places?
10. What newspapers and/or magazines do you subscribe to? Do you encourage your child to read them? If so, how? Do you discuss the article or stories in them in his presence? (Give examples) Does your child ever participate in these discussions - vs. listening?
11. Does your child take any lessons - musical, dance, academic subject? If so, what? How long has he taken these? How did he get started in this area?
12. What hobbies, if any, does your child have? How long has he been interested in this? What seemed to get him started in this area? (Note parent initiation)

13. What kinds of toys, games, books, pamphlets, etc. have you bought for your child in the past two years? (Include birthdays and holidays) Give example. Preschool period? - List.
14. Does your child have a library card? If so, how long has he had it? How did he come to get this card? (Note parent initiation) Do you remember the first few times he went to the library? Did anyone accompany him? Who? What kind of books have you encouraged him to read? Where else does he obtain reading material? Do you still read to him? Does he read to you? How often?
15. What appliances do you permit him to operate? How long have you allowed this?
16. Do you ask your child problems related to school activities that he is required to answer or solve on his own? Give examples.
17. Does your child have a desk of his own? If not, where does he work? What kinds of supplies are available for him to work with? (Observe)
_____paste _____ruler _____paper _____crayons _____paints
_____others (specify)
18. Do you have a dictionary in your home? If so, what kind? Does your child have a dictionary of his own? If so, what kind? Where are they kept? How often does your child use the dictionary? How often do you? When the child uses the dictionary, at whose initiation - his or yours? What other ways does your child have of learning new words? School, relatives, etc. Home dictionary: ___yes ___no Child's Dictionary: ___yes ___no
19. Do you have an encyclopedia in your home? ___yes ___no If so, when did you get it? Why? Do you buy yearbooks to accompany the encyclopedia? Where is it usually kept? How often do you use it? How often does your child use it?
20. Do you have an almanac or fact book? ___yes ___no If so, when was it purchased? Who uses it? When? What other sources of reading materials does your child have available to locate answers to his questions - library, friends, etc.?
21. Do you have any workbooks or other kinds of learning materials which you use to help your child in his learning? What other steps, if any, do you take to insure that your child's learning environment is what you want it to be?

22. Does your child receive homework? Do you help him with these assignments? How much time do you find to work with him on these assignments per week? How much time do you and your husband spend providing direct help to your child in his school learning on weekdays? On weekends? (Also ask for Preschool and Primary grades)
23. How often do you and your husband discuss your child's progress in school? What generally results from such discussions?
24. Have you had any experience in teaching? What? Your husband?
25. When does your child usually eat dinner on weekdays? Who eats with him? Who does most of the talking at the dinner table? About what?
26. At what other times are you together as a family on weekdays? What are some of the things you do together at these times?
27. What are some of the activities your husband engages in with the child on weekdays? On weekends?
28. Are there any adults outside of you and your husband that your child is particularly friendly with? If so, what does he seem to like about them? What do you see as this person's special qualities? How often does your child see them? What does he do when he's with them?
29. Did any other adults live with you when your child was first born? If so, who? (not name) How long did they live with you? What was the age of the child when they left? (Note: If the child was close to them, ask the following questions) How much schooling did they have? How would you rate their use of language?
30. Did you have a job outside the home when your child was younger? If so, who took care of the child?
31. Did you read books to him when he was younger? If so, when did you start? When did you stop? How regularly did you read to him?
32. About how many hours a week does he usually watch TV? What are his favorite programs? Do you approve of them? If not, what do you do about them?
33. What are your favorite TV programs? Did you recommend that your child watch any particular programs in the past week? If so, which ones? Did you discuss any programs with him after watching them?

34. How would you describe your child's language usage? Do you help him to increase his vocabulary? If so, how? How have you helped him to acquire appropriate use of words and sentences? Are you still helping him in these respects? If so, how?
35. How much would you estimate you correct him in his speech? (example use of "ain't") How particular are you about your child's speech? Are there particular speech habits of his that you are working on to improve? Give examples, if so. Earlier?
36. Are there any languages other than English spoken in the house? If so, which ones? Who speaks them? Does the child also speak this language?
37. How much schooling do you wish your child to receive?
38. How much schooling do you expect your child to receive?
39. What is the minimum level of education that you think your child must receive?
40. Do you have any ideas about the kind of work you would like to see your child do when he grows up? Do you have any ideas about the kind of work you would not like your child to do?
41. How does your husband feel about the kind of work he's doing? Is this the kind of work he always wanted to do?
42. How do you feel, in general, about the accomplishments of your family? How far have you been able to accomplish the aspirations or plans with which both of you started your family life?
43. How important has education been in achieving these goals? How much importance is education going to have in the life of your child? Would his future status be radically affected if he does not attain the level of education you wish him to attain?
44. What is the education level of some of your close friends and relatives?
45. Do any of their children go to college or have they? Does this include all of the children? Are there any who did not complete high school?
- 45a. Have you met with your child's present teacher? What is her(his) name? If so, when? Why? Does the teacher usually initiate parent-teacher conferences? If you ask for a meeting, for what purpose? What other ways, if any, are you in contact with the school? Do you like X's teacher? What makes you like her? Dislike her?

46. Do you know your child's best friends in the neighborhood and school? Do you approve of them? How would you rate these children in their studies? Do you help your child in choosing his friends? If so, how?
47. Do you read biographies of great people to X? If so, whose? Which ones have you read in the past two months? If so, whose?
48. Did you hug, kiss, or speak approvingly to your child in the past few days? If so, for what reasons?
49. What are some of the activities and accomplishments of your child that you praise and approve of? How do you do this? What things do you find you have to scold him for?
50. Have you thought about what kind of high school program you want your child to enroll in? If so, which one? Why?
51. How often does the school give out student reports? Who usually signs it? Do both parents see it? In what ways do you use the report?
52. Do you discuss his school progress with him? What particular things do you discuss with him?
53. Do you have college plans for him? If so, what have you done to financially prepare for this? In what other ways, if any, do you prepare him for the attainment of educational goals? (e.g., acquaint him with colleges, telling him about what people learn in college, etc.)
54. About how often do you ask your child how well he is doing in school? What particular things do you ask him?
55. Do you know what materials he uses in different areas covered in school? Do you know at the beginning of the school year what things he will be studying during the year in each subject? If so, how do you find this out? (Note: get specific topics, not subjects, e.g., reading)
56. How much time do you think a child X's age should devote to school type work?
57. Does he help you in the routine housework? If so, what responsibilities does he have? How quickly does he carry them out?

58. Is the housework distributed among the members of the family? If so, who did the planning for such assignments? How regularly are these assignments followed? What factors, if any, come in the way of carrying out such plans?
59. How would you rate your child's habit of completing his work on time, not leaving a problem undone, correcting his mistakes, etc? How did he acquire these habits?
60. Do you ever have to change your own plans for the sake of your child's school work? If so, what kinds of plans have you had to change?
61. Have you had to sacrifice any of your major needs or desires such as buying a new car, giving up a job, etc. for the present and/or future education of your child? If so, what did you give up? What were the immediate consequences?
62. Are you taking any courses or involved in a hobby? If so, what? How did you get involved in this? How are you doing it - formally or informally? Did you study any subjects or have a hobby during the past two year? If so, what?
63. When guests come to visit do you like X to hang around or go play?
64. Do you take X out with you when you run errands?

Turning to the final few questions, let me ask you about the neighborhood and the apartment in which you are living.

65. How is this as a neighborhood for children?
66. Where else have you lived? How did you choose it (them)?
67. How did you like it? Could you describe the layout of that apartment?
68. How long have you lived here?
69. How did you choose it?
70. Could you describe how this apartment is laid out?

(Note: after entire interview, ask: could you draw me those apartments?)

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Robert & Veda
~~Chaffrow~~ (1979) studied the ability of jurors to understand jury instructions. ~~Of the 35 people~~ ^{among} chosen at random from the files of Prince George County, Maryland, educational levels ranged from 12th grade through Ph.D., The study concluded that standard jury instructions were not understood by this ~~panel~~ relatively well educated panel.

In contrast,

^ The Harris Survey (House of Representatives, 1970) showed that as many as 18.5 million Americans, or 13% of the population, age 16 or older, ~~is~~ ^{were found to be} functionally illiterate and ^{unable to fill out a drivers license form or any of} ~~unable to fill out a drivers license form or any of~~ other standard forms in today's society. These people ~~are~~ ^{were shown} not to be sufficiently literate enough to survive in society today, and ^{This} Practical literacy was shown to decrease in direct proportion with income, and even in the low income group, those earning less than \$5,000 per year, the illiteracy rate of non-whites was much higher than than of whites.

Comparing those statistics with the demographic breakdown of inmates of state correctional facilities in 1974, showed that 60% of the population earned less than \$6,000 the year prior to arrest. Another 9% either did not know or did not report their income. 49% of the inmates were not white.

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Any talk of sexual equality, besides being phenomenologically absurd, is an insult to women. More so than to men. Women is obviously the favored sex, the vessel on which God has principally relied to unfold the mystery of human freedom and redemption, and the analogous mystery of love and life. It was Eve who boldly instigated the Happy Sin that called God into the world. It was Mary the Virgin who was given the power to admit or refuse to admit eternity into time. It was Mary who held God Himself in the confinement of a human body. It was Mary, alone among merely human beings, who was granted birth without sin and death without separation from her body. It was Mary Magdalene, the holy whore, who alone foretold the Lord's death. It was Mary Magdalene again who was first greeted by the Risen Lord, in the most sublime love scene of all time. It was the women of Jerusalem whose faith and love in the persecuted Lord never wavered, who stood by his side while all the men of the place, save one, took flight. It was Veronica whose love earned the image of The Face.

So it has been ever since. Man has his role: to lead, to govern—above all in the family. But he is less king there than she is Queen. How, in any healthy human relationship, could it be otherwise? The most profound human experiences are expressions, in one way or another, of the great unity of love and life: of sex. If sex is anything, it is the meeting place of love and life. And who, on that ground, is in command? Both take love, but who gives love better? Who gives life? He plants a seed which she nests into life; she joins the new life to her own life, and guides it into the world. Where he gives it a house and she gives it a home.

Christianity is chiefly blamed by the Lib crowd for woman's status. It is a valid accusation. All societies are patriarchal, for perfectly plain practical reasons. But only Christian societies—only Christian men—have given women first rank in the patriarchy. Only Christian men have honored women; only they have respected the pedestal which, since the Incarnation, is woman's birthright.

True, Christian societies, like others, have often tolerated in practice a double standard of sexual morality. But this hardly damages the point; it is not an honor to men to recognize greater expectations of virtue in women. The double standard is not an affirmation of man's moral superiority. It is a proof of woman's. And so in our time the Church not surprisingly has responded to the Lib's poison by creating a new order of lay Virgins: female virgins, that is.

Let men honor them. Let men honor all women by freeing them—to be women. In short, let men be men.

HOW MANY AMERICANS READ WELL ENOUGH TO SURVIVE?

HON. MARGARET M. HECKLER

OF MASSACHUSETTS

IN THE HOUSE OF REPRESENTATIVES

Wednesday, November 18, 1970

Mrs. HECKLER of Massachusetts. Mr. Speaker, a recently completed study has revealed a grim fact of American life: One out of every eight adult Americans may have great difficulty in obtaining Government Medicaid or public assistance, a bank loan, or even a social security number—simply because he cannot read well enough to fill out the application form. This is a shocking revelation for a Nation which prides itself in making quality education avail-

able to the greatest possible number of its citizens.

In the words of Walter W. Straley, chairman of the new National Reading Council, which commissioned the special study:

The study shows that as many as 18.5 million Americans—or 13 percent of the U.S. population 18 years and older—lack the reading ability necessary for survival in the United States today.

I believe that the findings of this significant study, called the "Survival Literacy Study," should be of concern to every American. I am pleased to insert it in the Record. The study was conducted for the National Reading Council by Louis Harris and Associates, Inc.

This study may be the first to attempt to measure reading ability as a survival technique rather than as an academic pursuit. It is especially disturbing to consider how very many Americans may be deprived of necessary services because they lack reading ability. In presenting the results of the 6-week study at the inaugural meeting of the National Reading Council on September 10, 1970, in Washington, Mr. Harris said that 1,685 persons were interviewed. They were chosen to represent a cross section of the overall population. Those interviewed were asked to fill out five common application forms, with this result:

Thirty-four percent had trouble reading a simplified Medicaid application form; 8-percent could not complete a typical driver's license form; 7 percent were unable to handle an application for a social security number and 3-percent failed to fill out a public assistance form.

The "Survival Literacy Study" evaluates literacy levels according to factors including regional differences, rural-urban differences, age, race, income, and education. I found it particularly disheartening—which this conclusion could be anticipated—to note that "the old and the poor each have serious reading problems," as the Harris study states, "but the elderly poor must struggle most for 'survival'."

I think that Mr. Harris, appearing before the council, summarized very expressively the purpose for which the study was undertaken:

We want to find out how a person's behavior—his whole life-style—is affected by reading trouble; what mainstream experiences he misses because of it.

In an effort to combat illiteracy and to develop a national reading program, the National Reading Council was appointed by President Nixon on July 31, 1970. It is operating with a first-year budget of \$1.5 million. Its members include prominent representatives of the fields of education, business, labor, entertainment, communications, science, and government. Its chairman, Mr. Straley, is vice president in charge of environmental affairs of the American Telephone & Telegraph Co.

The council recently established a National Reading Center in Washington, under the direction of Dr. Donald G. Emery, superintendent of schools of Scarsdale, N.Y., to serve as its working and

research arm and, as Mr. Straley emphasized, as "a center of innovation."

Innovation will be vital if the Nation is to meet the challenge to curb illiteracy. I commend the National Reading Council for this initial effort to define the dimensions of the problem which confronts us.

The full text of this important document, the "Survival Literacy Study," September, 1970, follows:

SURVIVAL LITERACY STUDY

(Conducted for the National Reading Council by Louis Harris and Associates, Inc.)

PURPOSE OF THE STUDY

On July 31, 1970, President Nixon announced the appointment of 40 men and women (including businessmen, teachers, Congressmen, civic leaders and entertainers) to serve on the National Reading Council, a supervisory board to a new national reading program. The Council's most immediate and urgent task was to measure the extent of reading deficiencies in the United States. To undertake this task, the National Council commissioned Louis Harris and Associates, Inc. This study, a ground-breaker in its attempt to measure scientifically the literacy rate among all sectors of the United States population, was to be completed in time for the Council's first annual meeting in Washington, D.C., on September 10th.

From its inception, the study was planned to measure the "survival" literacy rate in the United States. It would determine the percentage of Americans lacking the functional or practical reading skills necessary to "survive" in this country. How many Americans were prevented by reading deficiencies, we asked ourselves, from filling out application forms for such common needs as a Social Security number, a personal bank loan, Public Assistance, Medicaid, a driver's license? Fundamentally, this is a study of functional rather than by rote literacy.

The purpose of this study was to measure reading ability and not application forms. In order to avoid a defensive reaction on the part of the respondent, however, he was told, "we are doing a survey on the subject of different application forms people have to fill out. It seems these days that nearly everyone has to fill out application forms for many of the things they do."

Included in the questionnaire were five application forms similar to the ones mentioned above. The five forms were selected both on the basis of their common utility and frequent appearance in the lives of many Americans and according to the degree of difficulty of the reading material included in each. The forms were, however, simplified significantly to assure that the study evaluated reading ability and not the lay-out of the form itself.

Each respondent was presented the five forms in the same order. The interviewer was instructed under no conditions to read to the respondent any information printed on the forms. If the respondent was unable to write because of physical handicap or problems with penmanship, the interviewer was then instructed to write in the answers provided by the respondent. The study did not seek to measure writing ability, only reading. If the respondent was unwilling to supply any information requested on the form, he was instructed on the bottom of each application to draw a line through the space provided. These were counted as correct answers, since the respondent's ability to read and follow the instructions indicated his literacy. The respondents were also assured that these forms were unofficial and to be used only for purposes of public opinion research.

Interviewing on the study took place between August 17th and 24th, 1970.

SCORING METHODS

Performance on each individual application form and overall performance on the five forms together were measured according to a simple percentile scoring system. The Harris firm first counted the number of correct answers and compared them to the number of possible answers on each form. On Form I (Identification Form), for example, 15 answers were required and should have been supplied by the literate respondent. Fifteen, therefore, was used as a base for scoring purposes. If only three appropriate answers were supplied, the raw score was 3/15.

The base for each of four of the five forms varied according to the nature of the questions asked. Some questions were to be answered only by those respondents who had answered the previously question negatively. (For example, one form asked: "Are you able to work now? — If unable to work now, why are you not able to work now? —") In cases where the respondent correctly skipped a question, the scoring base was reduced.

In tabulating the scores recorded by the coding department, our computer operators followed the percentile reference code shown below:

Percentage correct:	Punch
0.....	1
10 to 19.....	2
20 to 29.....	3
30 to 39.....	4
40 to 49.....	5
50 to 59.....	6
60 to 69.....	7
70 to 79.....	8
80 to 89.....	9
90 to 100.....	0
Refusals.....	x

If on Form I with a base of 15 possible answers, for example, the respondent supplied three correct answers (20% correct), the score was recorded in Punch 4 of the computer column. Refusals to fill out an individual form also were recorded. After scoring each form separately, the computer arrived at an overall percentile score for each respondent.

"RANGE OF ILLITERACY"

Respondents who completed correctly 90% of the five forms averaged together considered fully literate for the purposes of this study. Incorrect answers to ten percent are overlooked in the scoring and attributed to carelessness, difficulty of the form structure and content, but not to reading deficiencies.

The basic approach in analyzing this study has been to order people on a continuum which reflects four types of "literacy groups":

"Low Survival Threshold"—Respondents who average more than 30% incorrect, that is, less than 70% correct on all five forms. The survival probability of this group must be assumed to be low. Relatively, they are considered functionally illiterate in modern American society. Despite the fact these respondents may show anywhere from 70% correct answers, they are still considered relatively illiterate. This pattern was followed in order to include in the functional illiterate group those Americans who do recognize certain familiar words (i.e., "name", "address"), but have serious reading and comprehension problems.

"Questionable Survival Threshold"—Respondents who average more than 20% incorrect answers, that is, less than 80% correct answers. Since the groups are figured relatively, this group includes respondents in the more-than-30% group also. Members of this literacy group filled out the forms with considerable difficulty and belong more in a questionable survival group.

3. **"Marginal Survival Threshold"**—Respondents who answer more than ten percent incorrect answers, that is, any number of correct answers below 90%. Generally, this group lacks total survival reading ability and includes members of the above two groups.

4. **"Likely Survival Threshold"**—Respondents who answer less than ten percent incorrect answers, that is, between 80-100% correct answers. This group is considered functionally literate.

The term "range of illiteracy" will appear throughout the report. It refers to the range between the "Low Survival" and "Marginal Survival" groups. This range includes members of groups 1, 2, and 3 above.

Chart I lists the application forms in the order of difficulty indicated by the results of the survey. Form IV (Application for Public Assistance) proves overall the easiest to read; only three percent of the people answered incorrectly more than ten percent of the form. Form V (Application for Medicaid) proved most difficult; nine percent of the people read incorrectly more than 30% of the form and 34% read incorrectly more than ten percent. The average range of illiteracy was from three percent (the percentage of people who averaged more than 30% incorrect) to 13% (the percentage who averaged more than ten percent incorrect). Converted into population, this represents a range of 4.3 million to 18.5 million. A total of 4.3 million Americans fall into the "Low Survival Threshold" group, 7.1 million into the "Questionable Survival Threshold" group, and 18.5 million into the "Marginal Survival Threshold" group.

The results of the study show, therefore, that, due to reading deficiencies, three percent of all Americans had difficulty filling out an application for Public Assistance, seven percent had difficulty completing a simple identification form (the equivalent of an application for a Social Security number), eight percent had trouble with an application for a drivers license, 11% with an application for a personal bank loan, and 34% with an application for Medicaid.

CHART I

(In percent)

	More than 30 percent incorrect	More than 20 percent incorrect	More than 10 percent incorrect
Total:			
Form IV.....	0	1	3
Form I.....	1	2	7
Form III.....	1	3	8
Form II.....	2	4	11
Form V.....	9	17	34
Average.....	3	5	13
Projected to population (in millions).....	4.3	7.1	18.5

II

Charts II, III, IV and V break down the results of the study into the four locations where respondents live: Rural Areas, Cities, Towns and Suburbs. The average range of functional illiteracy for rural inhabitants (see Chart II) was 4-16%; that is, four percent of the rural population interviewed missed more than 30% of the answers, seven percent missed more than 20% of the answers, and 16% missed more than ten percent.

III

City dwellers had similar difficulty in filling out the forms. Their average range of functional illiteracy (see Chart III) was 4-13%; that is, four percent of the city population interviewed missed more than 30% of the answers, six percent missed more than 20%, and 13% missed more than ten percent.

IV

Fewer people who live in small towns and cities had difficulty reading the forms. Only

an average of two percent read incorrectly more than 30% of the forms, a total of five percent failed on more than 20%, and 12% left more than ten percent unanswered.

V

Suburban residents filled out the forms most easily of these four groups. Their average range of functional illiteracy was a low 2-9%. Only Form V (Application for Medicaid) was difficult for some suburban residents; on this form six percent missed more than 30% of the answers, 11% missed more than 20%, and 28% missed more than ten percent.

CHART I-V

(In percent)

	More than 30 percent incorrect	More than 20 percent incorrect	More than 10 percent incorrect
Rural:			
Form I.....	1	2	9
Form II.....	1	3	12
Form III.....	2	4	11
Form IV.....	2	3	4
Form V.....	13	25	42
Average.....	4	7	16
Cities:			
Form I.....	1	3	9
Form II.....	4	6	13
Form III.....	2	5	9
Form IV.....	1	1	3
Form V.....	10	17	32
Average.....	4	6	13
Towns:			
Form I.....	1	1	5
Form II.....	1	3	12
Form III.....	1	3	7
Form IV.....	2	2	3
Form V.....	7	15	33
Average.....	2	6	12
Suburbs:			
Form I.....	2	0	2
Form II.....	2	0	6
Form III.....	1	2	7
Form IV.....	0	0	3
Form V.....	6	11	28
Average.....	2	3	9

¹ Less than 0.5 percent.

NOTE: Forms ranked according to difficulty with least difficult from first.

VI

The results of the study also were looked at in terms of regional areas: the South, the East, the Midwest and the West. The South had the highest average range of functional illiteracy—a range of 4-15%. Four percent answered incorrectly more than 30% of all forms averaged together; seven percent answered incorrectly more than 20% and 15% answered incorrectly more than ten percent.

VII

Among the regional groups, the East had the second highest range of functional illiteracy. Four percent of all Easterners interviewed missed more than 30% of the answers, six percent missed more than 20% and 14% missed more than ten percent.

VIII

The functional illiteracy rate of Midwesterners ranged from 3 to 13%. These figures suggest that the Midwest has an average illiteracy rate only slightly higher than that of the East and the South.

IX

People in the West tend to have fewer reading deficiencies than inhabitants of the other three regions, the study showed. A small average of one percent of all Westerners interviewed answered incorrectly more than 30% of the five forms. Four percent missed more than 20% and ten percent missed more than ten percent.

CHART X
INCOME

			More than 30 percent incorrect	More than 20 percent incorrect	More than 10 percent incorrect
Missed more than specified percent of the answers					
Missed more than specified percent of the answers	Missed more than specified percent of the answers	Missed more than specified percent of the answers			
South:					
Form I	2	4	1	2	7
Form II	2	5	3	5	10
Form III	2	5	2	4	9
Form IV	1	2	1	1	3
Form V	11	21	9	17	34
Average	4	7	3	6	13
West:					
Form I	2	3	(0)	1	5
Form II	3	5	1	3	9
Form III	3	5	(0)	1	7
Form IV	1	2	(0)	(0)	2
Form V	10	16	5	14	28
Average	4	6	1	4	10
East:					
Form I	2	3	7		
Form II	3	5	12		
Form III	3	5	11		
Form IV	1	2	5		
Form V	10	16	34		
Average	4	6	14		

Less than 0.5 percent.

Note: Forms ranked according to difficulty with least difficult form first.

CHART X
INCOME
(In percent)

	More than 30 percent incorrect				More than 20 percent incorrect				More than 10 percent incorrect			
	Under \$5,000	\$5,000 to \$9,999	\$10,000 to \$14,999	\$15,000 and over	Under \$5,000	\$5,000 to \$9,999	\$10,000 to \$14,999	\$15,000 and over	Under \$5,000	\$5,000 to \$9,999	\$10,000 to \$14,999	\$15,000 and over
Form I	2	1	1	1	4	3	1	1	12	8	3	2
Form II	4	2	1	1	8	4	2	2	19	13	5	3
Form III	2	(0)	1	1	6	2	3	2	13	7	9	3
Form IV	3	(0)	(0)	3	3	1	(0)	1	6	3	1	3
Form V	16	9	7	5	25	17	14	10	40	35	30	24
Average	5	2	2	1	9	5	4	3	18	13	10	7

Less than 0.5 percent.

XI

When reading deficiencies were correlated with race, the study revealed some striking figures. While the range of illiteracy for white respondents was a low 2-12%, the range for black respondents was a high 8-22%. Only two percent of all whites missed more than

30% of the answers, compared to eight percent of the blacks. While only five percent of the whites missed more than 20%, 13% of the blacks missed the same number. While only 12% of all whites answered incorrectly more than ten percent of the forms, a high 22% of all blacks interviewed answered incorrectly the same number.

CHART XI
RACE
(In percent)

	More than 30 percent incorrect		More than 20 percent incorrect		More than 10 percent incorrect	
	White	Black	White	Black	White	Black
Form I	1	3	2	6	6	15
Form II	2	6	3	11	10	21
Form III	(0)	4	2	9	7	18
Form IV	1	4	1	5	3	8
Form V	8	23	16	32	32	50
Average	2	8	5	13	12	22

Less than 0.5 percent.

CHART XII

INCOME UNDER \$5,000 BY RACE
(In percent)

	More than 30 percent incorrect		More than 20 percent incorrect		More than 10 percent incorrect	
	White	Nonwhite	White	Nonwhite	White	Nonwhite
Form I	1	3	2	7	10	18
Form II	4	6	7	13	18	23
Form III	2	4	5	11	10	22
Form IV	2	6	2	6	5	9
Form V	17	21	21	31	35	52
Average	4	8	7	14	16	25

Chart X illustrates that practical literacy decreases in direct proportion to income in the United States. A large five percent of the people with an annual income under \$5,000 missed over 30% of the answers, compared to only two percent with an income from \$5,000 to \$9,999, two percent with an income of \$10,000 to \$14,999, and a small one percent with an income of \$15,000 or more. While nine percent of those earning under \$5,000 missed 20% or more, only three percent of those earning \$15,000 or more missed the same number of answers. Likewise, 18% of those earning under \$5,000 missed more than ten percent, compared to seven percent who earn \$15,000 or more.

For the income group under \$5,000, the range of illiteracy was 5-18%, compared to 2-13% for the \$5,000-\$9,999 group, 2-10% for the \$10,000-\$14,999 group, and 1-7% for the \$15,000-and-over group.

XII

In comparing race with literacy the study focused particularly on one limited sector of both racial groups—those respondents earning less than \$5,000 annually. Even among members of this low income group, the illiteracy range of non-whites (8-25%) was much higher than that of whites (4-16%). While only four percent of whites in this income group missed more than 30% of the answers, eight percent of non-whites missed the same amount. While only seven percent of whites in this group answered incorrectly more than 20%, 14% of non-whites answered incorrectly the same number. Finally, while 16% of whites here missed more than ten percent, an enormous 25% of all non-whites earning less than \$5,000 a year missed more than ten percent of the answers on the forms.

XIII

For the purposes of this study, the U.S. population was divided into four age groups: people 16-24 years old, 25-49 years, 50-64 years and 65 and over years of age. The youngest group proved to be the most literate; their illiteracy range was a low 1-9%. The oldest (50 and over) group proved most deficient in reading ability, with an illiteracy range of 5-17%. Both the 25-49 year olds and the 50-64 year olds had an identical illiteracy range of 2-11%.

While only one percent of the youngest group missed over 30% of the answers on all forms averaged together, two percent of the 25-49 year olds missed over 30%, and five percent of the 50 plus group missed the same number. While only four percent of the under-25 year olds averaged more than 20% incorrect, five percent of the 25-49 year olds and eight percent of the 50 and over group missed more than 20%. Only nine percent of the 16-24 year olds answered incorrectly more than ten percent of the forms, while 11% of the 25-49 group and a large 17% of those 50 and over answered incorrectly more than ten percent.

* Non-white here includes blacks (Negroes), orientals, Puerto Ricans, and Mexican Americans.

CHART XIII.—AGE

(In percent)

	More than 30 percent incorrect				More than 20 percent incorrect				More than 10 percent incorrect			
	16 to 24	25 to 29	30 to 49	50 and over	16 to 24	25 to 29	30 to 49	50 and over	16 to 24	25 to 29	30 to 49	50 and over
Form I.....	(0)	1	(0)	2	1	2	1	4	3	5	5	12
Form II.....	1	1	2	4	2	4	3	7	5	9	9	19
Form III.....	(0)	1	1	1	2	4	4	4	9	7	8	9
Form IV.....	(0)	2	2	2	2	2	(0)	2	2	5	2	4
Form V.....	6	9	8	15	12	14	16	23	27	29	35	43
Average.....	1	2	2	5	4	5	5	8	9	11	11	17

† Less than 0.5 percent.

xiv

In comparing age with literacy, the study focused particularly on a limited sector of all age groups—those with an income of less than \$5,000 annually. For this low income group, the illiteracy range for all age groups is noticeably higher than the range for age

groups regardless of income. The illiteracy range for people under 30 years under \$5,000 is 2-13% (compared to a 2-10% range for all income groups together). The range for 30-49 years olders under \$5,000 is 4-16 (compared to the 2-11% range for all income groups). The range for 50 year olds and older

earning less than \$5,000 is 7-21% (compared to the 5-17% range for all income groups in that age category). The old and the poor each have serious reading problems, but the elderly poor must struggle most for "survival".

CHART XIV.—INCOME UNDER \$5,000 BY AGE

(In percent)

	More than 30 percent incorrect			More than 20 percent incorrect			More than 10 percent incorrect		
	Under 30	30 to 49	50 and over	Under 30	30 to 49	50 and over	Under 30	30 to 49	50 and over
Form I.....	1		2	4	4	3	8	12	13
Form II.....	1	3	7	5	5	11	12	17	24
Form III.....		4	4	4	7	8	13	10	15
Form IV.....			5			5	4	3	8
Form V.....	7	12	19	13	20	30	28	36	45
Average.....	2	4	7	5	7	11	13	16	21

xv

In their fight for equality, women have managed to surpass men slightly in reading ability. While only two percent of all women interviewed missed more than 30% of the answers, three percent of the men missed the same number. Only five percent of the women compared to six percent of the men incorrectly answered more than 20% of the forms. Only 11% of the women missed more than ten percent of the answers, while a larger 14% of the men missed the same number. Thus, the illiteracy range for the men were three to 14%, compared to a lower two to 11% for the women.

CHART XV.—SEX

(In percent)

	More than 30 percent incorrect		More than 20 percent incorrect		More than 10 percent incorrect	
	Men	Women	Men	Women	Men	Women
Form I.....	1	(0)	3	1	10	4
Form II.....	2	1	4	2	12	9
Form III.....	1	1	3	3	9	8
Form IV.....	1	1	2	2	4	3
Form V.....	3	9	12	17	36	33
Average.....	3	2	6	5	14	11

† Less than 0.5 percent.

xvi

Americans born outside the United States have assimilated relatively well into the literate population of this country. Their illiteracy range is only seven to 16%, compared with the three to 13% range among the total population. Seven percent of these

immigrants (compared to three percent of all Americans) missed more than 30% of the answers. Nine percent missed more than 20% (compared to five percent of all Americans). Finally, 16% missed more than ten percent of all answers (compared to 13% of all Americans).

CHART XVI.—BORN OUTSIDE OF UNITED STATES

(In percent)

	More than 30 percent incorrect		More than 20 percent incorrect		More than 10 percent incorrect	
	Respondents born outside of United States	Total respondents	Respondents born outside of United States	Total respondents	Respondents born outside of United States	Total respondents
Form I.....	3	1	5	2	9	7
Form II.....	8	2	9	4	19	11
Form III.....	5	1	6	3	10	8
Form IV.....	5	1	5	1	5	3
Form V.....	13	9	19	17	37	34
Average.....	7	3	9	5	16	13

xvii

The final dimension was educational background. Not surprisingly, reading ability increased in direct proportion to years of education. The illiteracy range of people who completed eighth grade or less was seven to 23%, compared to a two to 12% range for those who completed some high school, and a one to eight percent range for people

with some college education. It is striking, however, that 26% of the people with some college education missed more than ten percent of Form V. These figures suggest that the practical reading ability needed to complete the forms essential for "survival" may differ somewhat from the achievement-oriented or theoretical reading skills stressed in many of our schools and colleges.

CHART XVII.—EDUCATION

(In percent)

	More than 30 percent incorrect			More than 20 percent incorrect			More than 10 percent incorrect		
	8th grade or less	High school	College	8th grade or less	High school	College	8th grade or less	High school	College
Form I.....	2	1	(0)	5	2	1	17	6	3
Form II.....	6	1	1	9	3	2	27	9	5
Form III.....	4	1	1	8	3	2	17	8	4
Form IV.....	4	(0)	1	5	1	1	8	3	2
Form V.....	20	8	4	29	17	10	46	34	26
Average.....	7	2	1	11	5	3	23	12	8

† Less than 0.5 percent.

SAMPLING METHOD

The Harris study for the National Reading Council was based on a national sample survey of the civilian non-institutional population of the United States. (Alaska and Hawaii, however, are not represented in the sample.) Interviews were conducted with randomly designated respondents in 100 different locations throughout the country. The schedules (completed questionnaires) and forms were edited and coded in New York. The coded questionnaires were key punched and the data tabulated by standard computer equipment. Analysis of the data was done by Louis Harris and Associates, Inc.

The national sample used for this study is based on intercensal estimates of the population of each state in the country, and of the population resident in standard metropolitan areas and in the rest of the country. These population estimates are produced annually by the Bureau of the Census. The sample locations are selected biennially to reflect the cumulative changes in the country's demographic profile.

The national sample is stratified in two dimensions—geographic region and metropolitan (and non-metropolitan) residence. Stratification insures that the sample will reflect, within one percent, the national proportions of the constituent strata.

Within each stratum the selection of the ultimate sampling unit (a cluster of adjacent households) was achieved in a series of steps, technically called multi-stage cluster sampling. First states, then counties and then minor civil divisions (cities, towns, townships) were selected with probability proportional to census estimates of their respective household populations.

Maps of the selected civil division were obtained and partitioned by segments containing approximately the same number of households. This was generally done in New York, but for the smaller civil divisions, segmenting was generally performed in the field. One of the segments in each civil division was included in the literary survey.

Interviewers contact 16 households within each segment. At each household the respondent was chosen by means of a random selection pattern, geared to the number of adults sixteen years or older of each sex who live in the household. On the average a segment produced one dozen respondents who met the age, sex and voting requirements of the survey.

When the completed interviews were received in New York a subsample of the respondents were re-contacted to verify that the data had been accurately recorded. Occupation, industry, and "open-ended" public opinion questions were coded. The information contained in the coded questionnaires was then transferred to punch cards to permit computer processing and tabulation of the data.

Attempted interviews.....	1685
	Percent
Interviews completed.....	88
Interviews not completed.....	12
Communication barrier (language, deafness).....	8
Refused to fill out forms.....	3
Continuation prevented by blindness, visual defect.....	1

THE 52D ANNIVERSARY OF LATVIAN INDEPENDENCE

HON. EDWARD J. PATTEN

OF NEW JERSEY

IN THE HOUSE OF REPRESENTATIVES

Wednesday, November 18, 1970

Mr. PATTEN. Mr. Speaker, this past July 19 there was much pomp and cere-

mony in the little Nation of Latvia. Top Government officials hailed this day as the 30th anniversary of the restoration of Soviet power in Latvia. But the individual Latvian did not share the joy of his "elected leaders." Instead, he will silently commemorate today as that day when 52 years ago Latvia enjoyed for a moment the freedom we in this country so frequently take for granted.

The people of this Baltic nation had such high hopes when they embarked on their adventure 52 years ago. That was in 1918 when they joined Lithuania and Estonia in seceding from Russia. For several years it was necessary for them to defend their freedom against both Germany and Russia, but by May 1, 1920, the provisional Latvian Government had called a constituent assembly. This assembly in 1922 adopted a democratic constitution which provided for a universal, equal, direct, and secret vote. It also allowed equal rights and cultural autonomy to national minorities. At this time an agrarian reform plan was also put into effect, and the Latvian people were finally given an opportunity to till their own land—and even more important—to own their own land.

Then came 1940, and the invasion by Soviet Armed Forces. Now the Latvians can only remember freedom and democracy in their most private thoughts.

Mr. Speaker, I have many constituents of Latvian descent in my congressional district, and I have heard from them the truth about the takeover of their nation. These people are wonderful. They are so industrious and hard working. You would love them, and you would mourn with them over the loss of their beloved homeland.

So, to all my Latvian friends I want to say that my heart and thoughts are with you today. Please know that I will not cease my efforts until your homeland is once more free.

GET THE DRUG PEDDLERS

HON. EDWARD J. DERWINSKI

OF ILLINOIS

IN THE HOUSE OF REPRESENTATIVES

Wednesday, November 18, 1970

Mr. DERWINSKI. Mr. Speaker, it is certainly essential that a truly coordinated attack be sustained against all forms of drug traffic and use. Evidence of the tragedy of drug abuse is so obvious that dabbling with drugs cannot be encouraged or even tolerated.

A very timely and effective editorial in the Saturday, November 14, Chicago Tribune came to my attention as it effectively emphasized the international complications and developments in drug control. The item follows:

GET THE DRUG PEDDLERS

The battle against the "drug culture" requires both defensive and offensive strategy. The defensive strategy, as we noted yesterday, means recognizing the extent of our drug problem and the fact that it is being spawned mainly on the campuses of our colleges, high schools, and even grade schools.

It means conditioning children, parents and teachers so that they will not be tempted

to use drugs, will not condone the use of drugs, will fight back with the honest and cruel facts about drug addiction, and will never try to dodge the issue.

On the offensive side, the battle must be carried to the campus "pushers" [who may pose as parking lot attendants or stadium guards so that they can carry on their trade beyond observation]; and to the narcotics rings from which they obtain their supply; and to the smugglers who bring drugs into the country; and even to those foreign countries which are lax about enforcing their own laws against producing drugs and selling them.

It is worth noting that while countries like Mexico and Turkey, where some farmers depend on drugs for a livelihood, may wink at the sale of drugs for export, few countries if any are as tolerant of drug use within their own boundaries as the United States.

While our Supreme Court reversed the conviction of Timothy Leary and pulled the props out from under our antimarijuana laws, Europeans in particular have been tightening up on drugs. In France a cabinet member scoffed at the notion that drugs should be excused as a reaction against "society."

"A fine rationalization," the minister of the interior said, "to hide character weakness. Drug users... are sheep without personal motivation."

The French people are not going to fall for the drug culture, he said. And, just to make sure, he has added dozens of agents to the drug squad in the area of Marseilles, where drugs usually enter France [and where tons of them are illicitly transhipped to the United States].

Just this week, the West German government announced plans to put marijuana on the same footing as harder drugs. It recognized that both are part of the same problem and that it is unrealistic to try to fight them under different rules.

These are the same Europeans whose "sophistication" and "tolerance" some Americans admire when it comes to pornography, sexual matters, or alcohol. These Americans use the same logic in arguing for easier rules on marijuana, while in fact the Europeans are getting tougher. More than 400 young Americans, who went abroad under the misapprehension that they would find greener pastures, are languishing in foreign jails because they were caught with drugs [sometimes only marijuana] in their possession.

It's time for us to catch up with Europe. Peddlers of narcotics must no longer be allowed to pose as heroes for outwitting the "establishment," or as persecuted entrepreneurs or psychedelic travel agents. In a sense they are murderers, because they are leading hundreds of youngsters each year to their deaths.

It won't be easy to reverse years of inaction and tolerance. The drug traffic is too widespread to be stifled overnight. Outting off one supply route may simply raise prices and increase the pressure on peddlers and addicts to find other sources. But no program is going to work unless we go after the peddlers, from the 9th grade pusher in the boys' washroom to the international racketeer. The stakes are too great to accept excuses.

MAN'S INHUMANITY TO MAN—HOW LONG?

HON. WILLIAM J. SCHERLE

OF IOWA

IN THE HOUSE OF REPRESENTATIVES

Wednesday, November 18, 1970

Mr. SCHERLE. Mr. Speaker, a child asks: "Where is daddy?" A mother asks:

Table 6.18 Estimated number of inmates of State correctional facilities, by selected demographic characteristics, United States, 1974

NOTE: These data are estimates derived from a stratified probability sample of adult and youthful offenders held in the custody of State correctional authorities. The survey included not only those inmates detained in facilities directly administered by State correctional authorities, but also those in any public or private institution charged with the custody of persons under the jurisdiction of State correctional authorities. Examples of the latter arrangement are inmates committed to State mental hospitals and inmates housed in YMCA's while assigned to work-release programs. For discussion of the survey sampling procedures, standard error tables, and definitions, see Appendix 14. Juvenile offenders were excluded from the survey.

Characteristic	Number of inmates	Percent of inmates	Characteristic	Number of inmates	Percent of inmates
Sex:			Armed forces service:		
Total ^a	191,400	100	Total ^{a,c}	187,500	100
Male.....	185,000	97	Served.....	51,200	27
Female.....	6,300	3	Never served.....	136,400	78
Race:			Personal income (year prior to arrest):		
Total ^a	191,400	100	Total ^{a,d}	168,800	100
White.....	97,700	51	No income.....	7,600	5
Black.....	89,700	47	Less than \$2,000.....	32,400	19
Other.....	3,400	2	\$2,000 to \$3,999.....	80,700	18
Not reported.....	600	(^b)	\$4,000 to \$5,999.....	30,400	18
Age:			\$6,000 to \$9,999.....	29,900	18
Total ^a	191,400	100	\$10,000 or more.....	23,000	14
Under 18.....	1,800	1	Amount not known.....	12,600	8
18.....	5,500	3	Not reported.....	1,800	1
19.....	7,900	4	Length of time on last job:		
20 to 24.....	57,100	30	Total ^{a,d}	168,800	100
25 to 29.....	44,900	23	Less than 5 weeks.....	16,900	10
30 to 34.....	27,300	14	5 to 26 weeks.....	61,100	36
35 to 39.....	16,300	9	27 to 104 weeks.....	55,100	33
40 to 49.....	19,600	10	105 to 260 weeks.....	21,500	13
50 and over.....	10,300	5	261 or more weeks.....	13,700	8
Not reported.....	600	(^b)	Occupation at time of arrest:		
Level of educational attainment:			Total ^{a,d}	168,800	100
Total ^{a,c}	187,500	100	Professional and technical workers.....	4,900	8
Eighth grade or less.....	49,000	26	Managers and administrators.....	9,500	6
1 to 3 years of high school.....	65,900	35	Salesworkers.....	3,900	2
4 years of high school.....	52,200	28	Clerical workers.....	7,000	4
1 to 3 years of college.....	14,300	8	Craftsmen and kindred workers.....	39,300	23
4 years or more of college.....	1,500	1	Carpenters.....	4,400	3
Not reported.....	4,700	2	Auto mechanics.....	4,100	2
Employment status (month prior to arrest):			Painters.....	4,800	3
Total ^a	191,400	100	Other craftsmen.....	26,500	16
Employed.....	131,000	68	Operatives.....	48,100	29
Full-time.....	117,100	61	Welders.....	3,700	2
Part-time.....	13,800	7	Machine operators.....	3,800	2
Unemployed.....	59,000	31	Truck drivers.....	9,200	5
Looking for work.....	23,800	12	Other operatives.....	31,400	19
Not looking for work.....	35,200	18	Nonfarm laborers.....	29,200	17
Wanting work.....	9,100	5	Construction laborers.....	8,200	5
Not wanting work.....	26,100	14	Freight and material handlers.....	7,100	4
Not reported.....	1,400	1	Other nonfarm laborers.....	13,800	8
Marital status:			Farmers and farm managers.....	400	(^b)
Total ^{a,c}	187,500	100	Farm laborers and supervisors.....	4,000	2
Married.....	44,300	24	Service workers.....	19,200	11
Widowed.....	5,800	3	Others.....	500	(^b)
Divorced.....	31,900	17	Not reported.....	2,500	1
Separated.....	15,200	8			
Never married.....	89,900	48			
Not reported.....	300	(^b)			

^a Detail may not add to totals because of rounding. Percent distribution based on unrounded figures.

^b Less than 0.5 percent.

^c Includes sentenced inmates only.

^d Includes only those inmates who had held a full-time job after December 1968 or who had been employed during most of the month prior to their arrest.

Source: U.S. Department of Justice, Law Enforcement Assistance Administration, *Survey of Inmates of State Correctional Facilities 1974—Advance Report*, National Prisoner Statistics Special Report No. SD-NPS-SR-2 (Washington, D.C.: U.S. Government Printing Office, 1976), pp. 24, 25.

